ABSTRACT

A method of preparing low water-soluble medicine into solid nanometer pharmaceutical formulation is disclosed. According to the characters of molecular aggregates such as supramolecular chemical micelles and vesicles, the formulation, which based on the hydroxypropyl-beta-cyclodextrin and phospholipid, is prepared under the condition of hyperthermia sterilization and decompression. Such nanometer formulation is sterile particle or powder with loose porosity. For directly intravenous use, the formulation has targeting activity, sustained release and long circulating characters. While as a solid oral product, it is fast-release, fast-effective, and improved bioavailability characters, and is readily melted in mouth. The formulation utilizes secure accessories, traditional equipments and methods, thus, it is suited to be used and manufactured widely. Also disclosed is intravenous formulation of anticancer paclitaxel, which characterized that there has no polyoxyethylenated castor oil in it. Such intravenous formulation is nonallergic so that it has higher security and efficiency compared to present commercially available paclitaxel formulations.